

REMARKS

Claims 1-21 are pending, with claims 1 and 14 being independent. Claims 1, 3, 5, 14, 16, and 18 have been amended. Support for the amendments can be found in the originally-filed specification, at least at pages 1-3. No new matter has been added.

Claim Rejections – 35 U.S.C. §102

Independent claim 1 recites a user interface of a machine tool. The user interface includes a display that is divided into at least a first display region and a second display region, and an input unit. The first display region permanently displays a main menu that provides selection of different main modes of the user interface. Each main mode is associated with a main window that is opened in the second display region when a main mode is selected in the main menu. At least one of the main windows includes a permanently displayed submenu that provides selection of different submodes, with each submode being associated with a subwindow that is opened when an associated submode is selected. One or more of the main windows and the subwindows includes input fields. The input unit is for selecting the individual modes and for processing the input fields provided in a window. The display permanently displays which one of the main modes is selected. If, in an original main mode, a particular subwindow was opened and a user switched from the original main mode to another main mode, then if the user switches back to the original main mode, the particular subwindow is opened upon return into the original main mode.

Independent claim 14 recites a method of interfacing with a user of a machine tool. A first display region and a second display region are displayed in a display. A main menu is permanently displayed in the first display region, where the main menu provides a selection of different main modes of the user interface, and each main mode is associated with a main window. A main window is opened in the second display region when its associated main mode is selected in the main menu. A submenu is permanently displayed in at least one of the main windows, where the submenu provides a selection of different submodes that are each associated with a subwindow. A subwindow is opened when its associated submode is selected, input fields

are displayed in one or more of the main windows and the subwindows, and selection of one or more of a main mode or a submode is enabled through an input unit. The input fields at the input unit are processed, and the main mode that is selected is permanently displayed in the display. A particular subwindow is opened in an original main mode, a selection to switch from the original main mode to another main mode is received, a selection to switch from the other main mode back to the original main mode is received, and the particular subwindow is opened upon return to the original main mode.

Claims 1, 2, 4-6, 8, 11-15, and 17-19 have been rejected as being anticipated by U.S. Patent No. 6,389,325 (Rutkowski). Applicant requests withdrawal of this rejection because Rutkowski fails to describe or suggest a user interface of a machine tool in which at least one of the main windows associated with a main mode includes a permanently displayed submenu that provides selection of different submodes, and a user interface of a machine tool that includes a display that permanently displays which one of a main mode is selected, and if in an original main mode, a particular subwindow was opened and a user switched from the original main mode to another main mode, if the user switches back to the original main mode, the particular subwindow is opened upon return into the original main mode, as recited in independent claim 1, and as similarly recited in independent claim 14.

Rutkowski relates to a display unit 1 for a machine tool 5, where the display unit 1 includes a display 10 that displays display windows 20, 30. See Rutkowski at col. 2, lines 34-67 and Figs. 1 and 2. Each display window 20, 30 has a two-part structure including, respectively, a title line 21, 31 and a display area 22, 32, where the title line 21, 31 includes a title area 21.1, 31.1 in which the designation of the corresponding processing unit is disclosed. See Rutkowski at col. 3, lines 38-50 and Fig. 2. The title line 21, 31 also includes respective operation state areas 21.2-21.6, 31.2-31.6 that can be activated or selected by the user and the operation state areas include various possible operation states or modes of operation for a processing unit. See Rutkowski at col. 3, lines 55-62 and Fig. 2.

The Office appears to equate the title line 21, 31 with a first display region, the display area 22, 32 with a second display region, and the operation state areas 21.2-21.6 and 31.2-31.6

with a main menu that provides selection of modes of operation of the processing unit. The Office appears to argue that the display window 20 or 30 is a main window that is opened when one of the operation state areas 31.2-31.6 or 21.2-21.6 is selected. However, without conceding the merits of this analogy, applicant notes that the display window 20 or 30 is not opened in the second display area 32 or 22. Rather, the display window 20 or 30 is opened in the display 10. See Rutkowski at col. 2, lines 34-67 and Figs. 1 and 2. Moreover, there is nothing in Rutkowski that suggests that the display window 20 is opened when one of the operation state areas 31.2-31.6 is selected.

Additionally Rutkowski also fails to describe or suggest a submenu that is permanently displayed in a main window. In Rutkowski, the display windows 20, 30 (which the Office equates with the recited main window) display the title line 21, 31 (which the Office equates with the recited first display region) and the display area 22, 32 (which the Office equates with the recited second display region). There is no suggestion that a submenu is additionally permanently displayed in the display windows 20, 30 or in the display area 22, 32 (which, while not equated with the main window could be considered to open display data that can be considered a window). As Rutkowski explains, "various information relating to the processing unit associated with the display window 20, 30 is offered or presented visually to the user" such as "the display of particular user inputs, the display of the positions of machine axes, the representation of executed NC programs, the graphical representation of the workpiece, status information relating to the tool and/or the machine tool, workpiece processing simulations." See Rutkowski at col. 4, lines 19-31. Because Rutkowski fails to describe or suggest a submenu, Rutkowski also fails to describe or suggest submodes and subwindows, as also recited in claims 1 and 14.

Accordingly, claims 1 and 14 are allowable over Rutkowski. Claims 2, 4-6, 8, 11-13, 15, and 17-19 depend from one of the independent claims, and are allowable for at least the reasons that the independent claims are allowable, and for containing allowable subject matter in their own right. For example, claim 4 recites, among other features, that at least one of the main windows, the subwindows, or the sub-subwindows includes a navigation menu and a navigation

window. Rutkowski does not describe or suggest such a navigation menu and a navigation window.

Claim Rejections – 35 U.S.C. §103

Claims 3, 7, 16, and 20, which depend from independent claims 1 or 14, have been rejected as being unpatentable over Rutkowski. As discussed above, Rutkowski fails to describe or suggest a user interface of a machine tool in which at least one of the main windows associated with a main mode includes a permanently displayed submenu that provides selection of different submodes, and a user interface of a machine tool that includes a display that permanently displays which one of a main mode is selected, and if in an original main mode, a particular subwindow was opened and a user switched from the original main mode to another main mode, if the user switches back to the original main mode, the particular subwindow is opened upon return into the original main mode, as recited in independent claim 1, and as similarly recited in independent claim 14. Moreover, it would not have been obvious to modify Rutkowski to provide for these features because any such modification would change the principle of operation of Rutkowski's user interface, which is to provide a control for a machine tool that includes several separate processing units with a visual presentation of information relating to each processing unit. See Rutkowski at col. 1, line 46 to col. 2, line 10.

Accordingly, for these additional reasons, claims 1 and 14 are allowable over Rutkowski. Dependent claims 3, 7, 16, and 20 are allowable for at least the reason that claims 1 and 14 are allowable and for containing allowable subject matter in their own right. For example, claim 3 recites that at least one of the subwindows includes a permanently displayed sub-submenu for selecting different sub-submodes of a selected submode and a sub-subwindow associated with each sub-submode such that a sub-subwindow is opened when its associated sub-submode is selected. Rutkowski does not describe or suggest such a subwindow, nor would it have been obvious to modify Rutkowski to provide such a subwindow, for at least the reasons discussed above.

The Office argues that it would be obvious to display a sub-subwindow when a user selects an operation state "to create a new window to assign to a different processing unit or task," citing col. 3, lines 1-3 of Rutkowski. This passage of Rutkowski explains that windows 20, 30 "are each assigned to different processing units or processing tasks of the respective machine tool which can be executed simultaneously." However, there is nothing in this passage that would suggest that the windows 20, 30 would include a permanently displayed submenu that provides selection of different submodes that are each associated with a subwindow, or that a sub-subwindow would be associated with a sub-submode that is selected using a permanently displayed sub-submenu of the subwindow. At most, the cited passage provides motivation for merely adding another window 20, 30, but even if one adds another window 20, 30, one would still not obtain the features of claims 1 or 3.

Claim 10 has been rejected as being unpatentable over Rutkowski in view of U.S. Patent No. 6,236,339 (Nishiyama). Applicant requests withdrawal of this rejection for the following reasons. Claim 10 depends from claim 1, which was rejected as being anticipated by Rutkowski. As discussed above, Rutkowski fails to describe or suggest a user interface of a machine tool in which at least one of the main windows associated with a main mode includes a permanently displayed submenu that provides selection of different submodes, and a user interface of a machine tool that includes a display that permanently displays which one of a main mode is selected, and if in an original main mode, a particular subwindow was opened and a user switched from the original main mode to another main mode, if the user switches back to the original main mode, the particular subwindow is opened upon return into the original main mode, as recited in independent claim 1.

Nishiyama does not remedy the failure of Rutkowski to describe or suggest this subject matter. In Nishiyama, an icon group A_i that provides a selection of different main modes (Ab_1 , Ab_2 , etc.) is displayed at a top portion of a window, and when a user selects one of the main modes (such as mode Ab_2 for the bending order/dies instruction program), a bending order instruction program displays a control parameter setting screen B_1 , an exploded drawing screen B_2 , and simulation screens B_3 , B_4 in a lower portion of the window. See Nishiyama at col. 10,

lines 10-26 and Figs. 5 and 12. It appears that a user can select various bending lines (for example, lines 1-7) of the object shown in the drawing screen B₂ and a simulation image of the bent object is shown in screen B₃. See Nishiyama at col. 10, lines 22-43 and Fig. 12.

However, Nishiyama never describes or suggests that if in an original main mode (such as mode Ab₂), a particular subwindow (such as screen B₃) was opened and a user switched from the original main mode (such as mode Ab₂) to another main mode (such as mode Ab₁), if the user switches back to the original main mode (such as mode Ab₂), the particular subwindow (screen B₃) is opened upon return into the original main mode (such as mode Ab₂). Rather, Nishiyama explains that information setting screens are arranged along a process flow to avoid switching between different screens. See Nishiyama at col. 2, lines 34-57. Thus, the user interfaces with the different main modes (Ab_i) one after the other, as they are arranged along a process flow. There is no hint that switching between the main modes of Nishiyama is improved.

Accordingly, claim 1 is allowable over any proper combination of Rutkowski and Nishiyama, as is dependent claim 10.

Claims 9 and 21 have been rejected as being unpatentable over Rutkowski in view of U.S. Patent No. 6,944,829 (Dando). Applicant requests withdrawal of this rejection for the following reasons. Claims 9 and 21 depend, respectively, from claims 1 and 14, which were rejected as being anticipated by Rutkowski. As discussed above, Rutkowski fails to describe or suggest a user interface of a machine tool in which at least one of the main windows associated with a main mode includes a permanently displayed submenu that provides selection of different submodes, and a user interface of a machine tool that includes a display that permanently displays which one of a main mode is selected, and if in an original main mode, a particular subwindow was opened and a user switched from the original main mode to another main mode, if the user switches back to the original main mode, the particular subwindow is opened upon return into the original main mode, as recited in independent claim 1 and as similarly recited in independent claim 14.

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Dando, which was not relied upon to show these features, does not remedy the failure of Rutkowski to describe or suggest this subject matter. Accordingly, claims 1 and 14 are allowable over any proper combination of Rutkowski and Dando, as are dependent claims 9 and 21.

Conclusion

In conclusion, applicant submits that all claims are in condition for allowance. The fee for \$120.00 for the One Month Petition for Extension of Time to and including March 26, 2008 is being paid concurrently with the Electronic Filing System (EFS). Please apply all charges or credits to deposit account 06-1050, referencing Attorney Docket No. 15540-064US1.

Respectfully submitted,

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